



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/570,141

03/01/2006

Kazutaka Hara

062189

5071

38834

7590

03/08/2010

WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP
1250 CONNECTICUT AVENUE, NW
SUITE 700
WASHINGTON, DC 20036

EXAMINER

CHOI, JACOB Y

ART UNIT

PAPER NUMBER

2885

NOTIFICATION DATE

DELIVERY MODE

03/08/2010

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentmail@whda.com

Office Action Summary	Application No. 10/570,141	Applicant(s) HARA ET AL.	
	Examiner JACOB Y. CHOI	Art Unit 2885	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 September 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 and 15-28 is/are pending in the application.
- 4a) Of the above claim(s) 1-7 and 23-26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8-13, 20-22 and 28 is/are rejected.
- 7) ☒ Claim(s) 15-19 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 March 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims **8-13, 20-22, 22, and 28** are rejected under 35 U.S.C. 103(a) as being unpatentable over Weber et al. (USPN 6,025,897) in view of Nitto Denko Corp (JP 10321025).

Regarding claim 8, Weber et al. discloses a sidelight type backlight light guide plate (34), a polarizing layer (12) which transmits (42) light having a first polarization orientation (column 3, lines 25-65; "... *ray bundle is incident on the reflective polarizer 12 which transmits light having a first polarization orientation referred to as "(a)" and effectively reflects light"*), and selectively reflects (40) the other polarized light component is disposed on one surface of the sidelight type backlight guide plate (34), and a reflection plate (37, 36, & 39) having a respective slope structure is disposed on one other surface of the sidelight type backlight light guide plate (FIG 7; columns 3-4, lines 25-15; "... *It should be appreciated that a diffuse reflective surface ... can be formed of transparent surface textured polycarbonate"*).

Weber et al. fails to include details of the transmittance angle dependent polarizing layer, a polarizing element.

Nitto teaches a polarization element (1) obtained by disposing a retardation layer (12, 14) between at least two reflection polarizers (11, 13, 15, 16) having wavelength band, overlapped one on the other [0012-0016 & 0042-0047], of selective reflection of polarized light.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the polarizing element of Weber et al. because the known technique of providing a retardation layer between two reflection polarizer to reduce a slant transmitted elliptically polarized light, without damaging a transmitted circularly polarized light characteristic, was recognized as part of ordinary capabilities of one skilled in the art. See *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385 (2007).

Regarding claim 9, Nitto further teaches the transmittance angle dependent polarizing layer transmits a circularly polarized light, while selectively reflects a reverse circularly polarized light [0007-0008].

Regarding claim 10, Nitto further teaches the transmittance angle dependent layer comprises at least one cholesteric liquid crystal polymer layer [0009].

Regarding claim 11, Nitto further teaches the transmittance angle dependent polarizing layer is a cholesteric liquid crystal band-pass filter.

Regarding claim 12, Nitto further teaches the transmittance angle dependent polarizing layer transmits one of linearly polarized light perpendicular to each other, while selectively reflecting the other thereof [0058, 0068, & 0070].

Regarding claim 13, Nitto further teaches the transmittance angle dependent polarizing layer is multilayer laminated made of polymers having a birefringent anisotropy [0038, 0047, 0049, & 074].

Regarding claim 20, Weber et al. further discloses an optical layer having a function to cancel (36, 218, 413, 113, and/or 176) polarization of light.

Regarding claim 21, Weber et al. further discloses the optical layer having polarization canceling ability is placed on a surface of the repetitive slope structure of the reflection plate (FIGS 7, 10-11, 13, & 14).

Regarding claim 22, Weber et al. further discloses the optical layer having polarization canceling ability is a retardation plate (36, 218, 413, 113, and/or 176).

Regarding claim 27, Weber et al. further discloses an average slope angle Θ_2 of the repetitive slope structure of the reflection plate disposed on one surface of the sidelight type backlight light guide plate has the following relation to a peak angle Θ_1 in an emitting light direction of the sidelight type light guide plate: $\Theta_2 = (\Theta_1 / 2) \pm 10^\circ$ (FIG 7; columns 6-7, lines 65-20; "... *prism having peak angles in the range of 70 degrees to 110 degrees will work with varying degrees of effectiveness with the invention*"). It has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 233.

Regarding claim 28, Weber et al. further discloses a liquid crystal cell (FIG 10), and a polarizing plate (e.g., 149 & 150) disposed on both sides of the liquid crystal cell. (147).

Allowable Subject Matter

Claims **15-19** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

Applicant's arguments with respect to claims **8-13**, **20-22**, **22**, and **28** have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JACOB Y. CHOI whose telephone number is (571)272-2367. The examiner can normally be reached on Monday-Friday (10:00-7:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jong-Suk (James) Lee can be reached on (571) 272-7044. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2885

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jacob Y Choi
Primary Examiner
Art Unit 2885

JC

/Jacob Y Choi/
Primary Examiner, Art Unit 2885